Serial No.: 10/814,079 Filed: March 30, 2004

Page : 6 of 10

REMARKS

In response to the Office Action mailed December 17, 2008, Applicants cancelled claims 1-3 and 14-20. Applicants also amended claims 4 and 9, and added new claims 21-25. Claims 4-13 and 21-25 are presented for examination.

The Examiner rejected claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Chevallier, or under 35 U.S.C. §103(a) as being unpatentable over Chevallier. Applicants cancelled these claims without prejudice, so the rejection of these claims should be withdrawn.

The Examiner rejected independent claim 4 and its dependent claims 5-13 under 35 U.S.C. §103(a) as being unpatentable over Chevallier in view of Mangin. As amended, claim 4 covers a composition that includes a plurality of substantially spherical porous silica particles, where, for at least some of the plurality of substantially spherical porous silica particles, a pore volume of the substantially spherical porous silica particles is from about 0.4 ml/g to about 1.6 ml/g. Chevallier does not explicitly disclose that his silica particles have a pore volume of from about 0.4 ml/g to about 1.6 ml/g. Nor has the Examiner demonstrated that Chevallier inherently discloses that his silica particles have such a pore volume. *See* MPEP §2112. Mangin also does not explicitly or inherently disclose particles with a pore volume of from about 0.4 ml/g to about 1.6 ml/g. Thus, while Applicants do not concede that it would have been obvious (or perhaps even possible) to combine Chevallier and Mangin in the manner indicated by the Examiner, even if the references were so combined, the result would not be the subject matter covered by independent claim 4. Claims 5-13 recite further features and are even further removed from the Examiner's proffered combination of references.

As an example, claim 9 recites that the density of the particles is from about 1.1 grams per cubic centimeter to about 1.4 grams per cubic centimeter. Neither Chevallier nor Mangin explicitly disclose that their particles have such a density, and the Examiner has not established that either reference inherently discloses that their particles have such a density. Accordingly, while Applicants do not concede that it would have been obvious (or perhaps even possible) to combine Chevallier and Mangin in the manner indicated by the Examiner, even if the references

Serial No.: 10/814,079 Filed: March 30, 2004

Page : 7 of 10

were so combined, the result would not be particles having a density of from about 1.1 grams per cubic centimeter to about 1.4 grams per cubic centimeter.

As another example, claim 10 recites that the particles have a pore volume distribution such that about 70% or more of the pore volume of the particles is made up of pores having pore diameters which have a tolerance of about 10 nm or less on the mean pore diameter. Neither Chevallier nor Mangin explicitly disclose that their particles have such a pore volume distribution, and the Examiner has not established that either reference inherently discloses that their particles have such a pore volume distribution. Accordingly, while Applicants do not concede that it would have been obvious (or perhaps even possible) to combine Chevallier and Mangin in the manner indicated by the Examiner, even if the references were so combined, the result would not be particles having a pore volume distribution such that about 70% or more of the pore volume of the particles is made up of pores having pore diameters which have a tolerance of about 10 nm or less on the mean pore diameter.

As a further example, claim 11 recites that the particles exhibit a loss of attrition resistance of about 0.1% by weight or less. Neither Chevallier nor Mangin explicitly disclose that their particles have such a loss of attrition resistance, and the Examiner has not established that either reference inherently discloses that their particles have such a loss of attrition resistance. Accordingly, while Applicants do not concede that it would have been obvious (or perhaps even possible) to combine Chevallier and Mangin in the manner indicated by the Examiner, even if the references were so combined, the result would not be particles having a loss of attrition resistance of about 0.1% by weight or less.

With regard to claims 10 and 11, the Examiner said:

The properties of loss of attrition resistance of about 0.1% by weight or less and a tolerance of about 10 nm or less on the mean pore diameter for 70% or more of the pore volume in the pore volume distribution are expected to follow from the composition of the references as combined absen[t] clear evidence showing the contrary. (Office Action, p. 6.)

Serial No.: 10/814,079 Filed: March 30, 2004

Page : 8 of 10

But, the Examiner provides no evidence to support this statement. It is well established that such an approach is improper. For example, as explained at MPEP §2144.03 (emphasis in original):

It would <u>not</u> be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21. *See also In re Grose*, 592 F.2d 1161, 1167-68, 201 USPQ 57, 63 (CCPA 1979) ("[W]hen the PTO seeks to rely upon a chemical theory, in establishing a prima facie case of obviousness, it must provide evidentiary support for the existence and meaning of that theory."); *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) ("[W]e reject the notion that judicial or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice.").

It is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience-or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings."). While the court explained that, "as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction," it made clear that such "expertise may provide sufficient support for conclusions [only] as to peripheral issues." *Id.* at 1385-86, 59 USPQ2d at 1697. As the court held in Zurko, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. Id. at 1385, 59 USPQ2d at 1697.

Further, to the extent that the Examiner's intent is to establish that one or both of the references inherently disclose the claimed subject matter, as explained in MPEP §2112 (emphasis in original):

Serial No.: 10/814,079 Filed: March 30, 2004

Page : 9 of 10

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." In re Robertson, 169 F.3d 743, 745, 49 USPO2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) (The claims were drawn to a disposable diaper having three fastening elements. The reference disclosed two fastening elements that could perform the same function as the three fastening elements in the claims. The court construed the claims to require three separate elements and held that the reference did not disclose a separate third fastening element, either expressly or inherently.). >Also, "[a]n invitation to investigate is not an inherent disclosure" where a prior art reference "discloses no more than a broad genus of potential applications of its discoveries." Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings, 370 F.3d 1354, 1367, 71 USPQ2d 1081, 1091 (Fed. Cir. 2004) (explaining that "[a] prior art reference that discloses a genus still does not inherently disclose all species within that broad category" but must be examined to see if a disclosure of the claimed species has been made or whether the prior art reference merely invites further experimentation to find the species.

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (Applicant's invention was directed to a biaxially oriented, flexible dilation catheter balloon (a tube which expands upon inflation) used, for example, in clearing the blood vessels of heart patients). The examiner applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular preform and then injecting air into the preform to expand it against a mold (blow molding). The reference did not directly state that the end product balloon was biaxially oriented. It did disclose that the balloon was "formed from a thin flexible inelastic, high tensile strength, biaxially oriented synthetic plastic material." *Id.* at 1462 (emphasis in original). The examiner argued that Schjeldahl's balloon was inherently biaxially oriented. The Board reversed on the basis that the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency.).

Serial No.: 10/814,079 Filed: March 30, 2004

Page : 10 of 10

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejection of claims 4-13

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: February 2, 2009 /Sean P. Daley/

Sean P. Daley Reg. No. 40,978

Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110

Telephone: (617) 542-5070 Facsimile: (877) 769-7945

22098416.doc